



# The Effect of the Life Satisfaction of Individuals Over 65 Years on Their Happiness

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## Abstract

In our study, it was aimed to examine the effect of life satisfaction of individuals over 65 years of age on the happiness according to some demographic variables. 410 women and 399 men over 65 years of age participated in the study. The measurement tool to be used in the study was delivered to the participants via Google Form; and it was paid attention that they participated voluntarily. It was administered to 834 people in total and 809 scales were deemed suitable for analysis. The life satisfaction scale, which was developed by Diener et al. (15) and adapted into Turkish by Dağlı and Baysal (10), and the happiness scale which was adapted by Demirci, İ. and Ekşi, H. (12), were used as data collection tools in the study. Descriptive statistics, reliability analysis, independent sample t test for binary variables, ANOVA test and Benferonni analysis for more than two variables were applied in the analysis of the data. As a result, according to the statistical results of the participants, it is seen that their happiness levels ( $\bar{x}=19.90$ ) and life satisfaction levels are high ( $\bar{x}=15.72$ ). It was determined that there was a high level of positive correlation between the life satisfaction of the participants and their happiness levels ( $r=0.723$ ). As a result of the ANOVA analysis performed between life satisfaction and happiness levels and the variables of doing sports and sedentary life, it is seen that there are statistically significant differences ( $p<0.05$ ).

**Keywords:** Over 65 Geriatrics, Sports, Life satisfaction, Happiness

## Özet

### 65 Yaş Üstü Bireylerin Yaşam Doyumlarının Mutluluk Üzerine Etkisi

Araştırmamızda 65 yaş üstü bireylerin yaşam doyumlarının mutluluk üzerine etkisinin bazı demografik değişkenlere göre incelenmesi amaçlanmıştır. Çalışmaya 65 yaş üzeri 410 kadın, 399 erkek katılmıştır. Çalışmada kullanılacak ölçme aracı katılımcılara 'Google Form' aracılığı ile ulaştırılmış, gönüllü olarak katılmalarına özen gösterilmiştir. Toplamda 834 kişiye uygulanmış ve analiz için 809 ölçek değerlendirilmeye uygun görülmüştür. Araştırmada veri toplama aracı olarak Diener, Emmons, Larsen ve Griffin (15) tarafından geliştirilmiş olan, Dağlı ve Baysal (10) tarafından Türkçeye uyarlanmış olan yaşam doyumunu ölçeği ile Demirci, İ. ve Ekşi, H. (12) tarafından uyarlanması yapılan mutluluk ölçeği çalışmamızda kullanılmıştır. Verilerin analizinde ise tanımlayıcı istatistik, güvenilirlik analizi ve ikili değişkenlerde Bağımsız örneklem t testi, ikiden fazla değişkenlerde Anova testi ve

Benferonni analizi uygulanmıştır. Sonuç olarak; katılımcıların istatistik sonuçlarına göre mutluluk düzeylerinin ( $\bar{x}=19.90$ ) ve yaşam doyum düzeylerinin yüksek olduğu görülmektedir ( $\bar{x}=15.72$ ). Katılımcıların yaşam doyumları ile mutluluk düzeyleri arasında yüksek seviyede pozitif yönde ilişki olduğu tespit edilmiştir ( $r=0.723$ ). Yaşam doyumları ve mutluluk düzeyleri ile spor yapma ve sedanter yaşama değişkeni arasında yapılan Anova analizi sonucunda ise istatistiksel olarak anlamlı farklılıklar olduğu görülmektedir ( $p<0.05$ ).

**Anahtar Kelimeler:** Geriatri, Spor, Yaşam Doyumu, Mutluluk

## INTRODUCTION

Aging is the occurrence of irreversible functional changes in the organism as one gets older. With these changes, physical features and cognitive features regress, and the ability of the person to establish a balance between systems decreases (28,31). There are many definitions of aging in the literature. According to one definition, aging is defined as "being old and revealing of the effects of aging" (3). Aging is a process and how the elderly person maintains this process also depends on their living habits.

Today, 10 percent of the total human population in the world consists of people aged 65 and over, and it is estimated that this rate will be over 16 percent in 2050. By 2050, it is predicted that there will be around 16 million elderly people aged 65 and over in Turkey (25). This foresight, which will not be underestimated, reminds us of the value of healthy living and aging.

The expectations of aging individuals in order to live a quality life are to be able to perform daily life activities such as walking, climbing stairs, getting up from where they are without help. However, with aging, changes in the cardiovascular system, musculoskeletal system and neuromuscular systems make these functions difficult. This may lead to a decrease in the activities of daily living of the elderly or a completely sedentary lifestyle. As a result, individuals face the loss of their independence (9,26). However, individuals over 65 want to continue their remaining lives happily, because the ultimate goal of every person is life satisfaction and the desire to reach happiness.

The issue of what good living conditions is and how to achieve them is a situation that has been considered and studied for many years. Within the framework of this process, the first thing we encounter is the interpretations that good life is related to virtue, how the individual determines his/her life standards, the capacity to fulfill his/her roles and responsibilities correctly, or the component of emotions such as happiness that s/he expresses in his/her life (18).

The concept of life satisfaction is "the situation or result obtained by comparing the things one wants and has". In addition, life satisfaction refers not only to the satisfaction associated with a particular situation, but also to the state of being well in various aspects such as satisfaction, morale, happiness, motivation, etc. in our life in general (1). The concept of life satisfaction in elderly individuals is associated with the combination of various factors such as personality traits, physical opportunities and methods of coping with problems (28,21). Another definition of life satisfaction can be as "a measure of the well-being of individuals' quality of life" (4,28). Therefore, life satisfaction is one of the fundamental emotions, which individuals will require especially after the age of 65. It is because it is a satisfaction process that is necessary for coping with diseases, not losing their life energy, and of course for many mood controls.

Of course, happiness is one of the most significant aspects influencing and enhancing a person's life satisfaction. Since ancient times, philosophers stated that happiness is a great motivator for leisure activities (19). It is seen that it has not lost its importance today and it continues to be emphasized. Although the concept of happiness continues to be discussed on many different platforms, it is seen that a clear consensus has not been reached and many variables affect this situation. Although the studies conducted in this field have been the subject of researches in the last 30 years, happiness is still a concept that has uncertainties and the factors affecting happiness vary (27).

Diener et al. (17) defined the happiness in their study as the pleasure obtained from life, our satisfaction from life, our positive feelings, a meaningful life style and a feeling of contentment. Happiness is widely believed to be one of the most crucial elements of leading a good life. However, the concept of happiness is

expressed as an accumulation of emotions, which by its nature does not have a single definition, its difference makes sense in line with the different needs of individuals, but is indispensable for everyone at the end of the day (17).

In view of this knowledge, it is aimed to examine the effect of life satisfaction of individuals over 65 years of age on happiness according to some variables, considering that our study can help to determine the factors affecting life satisfaction and happiness of individuals over the age of 65 in our country and to plan priorities in line with socio-demographic variables.

## **METHOD**

The sample of the study consists of 809 people, 410 female and 399 male, over the age of 65. It is a descriptive study conducted in the survey model. According to Karasar (23), a descriptive study "handles a past or still ongoing situation, event, phenomenon, individual and objects as they are in their own conditions."

### **Data Collection**

The participants were included voluntarily, and the study's scale was distributed to them via "Google Form". 834 individuals in total were contacted, and 809 scale forms were accepted for analysis.

### **Data Collection Tool**

Demographic Information; personal information questions such as gender, age, marital status, educational status, number of children, sports experience were asked to the individuals participating in the study. The Life Satisfaction Scale (LSS), a unique scale with a total of 5 items and a single-factor structure, was created by Diener et al.(15) and adapted to Turkish by Dagli and Baysal (10). The original formula factor one of the scale is the self-assessment performance, consisting of five items and 7-point Likert-type ratings. Each item is evaluated according to a 7-point response system (1: Strongly Agree - 7: Completely Agree). To test the consistency between the scores obtained from both scales, the Pearson Product Multiplication Correlation Coefficient was calculated and found to be 0.92. "Happiness Scale" adapted by Demirci, Ekşi. (12) consists of one dimension and 6 items. There are no reverse items in the scale. 5-point Likert-type ratings. Each item is evaluated according to a 5-point response system (1: Strongly Agree - 5: Completely Agree). The Cronbach alpha internal consistency coefficient of the scale was calculated as .83.

### **Statistical Analysis**

The statistical package program SPSS 25.0 was used to analyze the information from the "Demographic Information Form" and the "Life Satisfaction and Happiness Scales". By examining the Skewness and Kurtosis values while analyzing the data, it was determined whether the parametric tests fulfilled the necessary requirements (6). When we look at the skewness and kurtosis values from the study, it appears that they are between (2-) and (+2), and it was decided to apply parametric tests in this direction (20). In this direction, descriptive statistics, t-test, and ANOVA tests were used as statistical methods within the evaluation of the data.

### **Ethical approval and institutional permission**

The ethics permission to do this research was obtained with decision number 33 at the Aydın Adnan Menderes University Ethics Committee meeting on 18.01.2023.

## FINDINGS

Variables		f	%
Gender	Female	410	50,7
	Male	399	49,3
Age	65-67 years	274	33,9
	68-70 years	221	27,3
	71-73 years	118	14,6
	74 years and older	196	24,2
Marital Status	Married	518	64,0
	Single-Divorced-Widowed	291	36,0
Education status	Primary	431	53,3
	Secondary	203	25,1
	High School	115	14,2
	Bachelor's and above	60	7,4
Number of children	One child	105	13,0
	Two children	243	30,0
	3 and more	461	57,0
Sports Experience	10 years or less	108	13,3
	over 10 years	59	7,3
	I have never played sports	495	61,2
	I do sports intermittently	147	18,2
<b>Total</b>		809	100,0

In Table 1, the highest variables in the descriptive statistics for the participants consist of female participants (50.7%) in the gender variable, 65-67 years of age (33.9%) in the age variable, married participants (64.0%) in the marital status variable, primary school graduates (53.3%) in the education status variable, participants with 3 or more children in the number of children (57.0%), and the participants who did not do any sports in the sports experience variable (61.2%).

**Table 2.** Reliability Analysis Results

Scale	Cronbach Alpha Coefficient
Happiness	.898
Life Satisfaction	.875

Results of the scales' reliability analysis are displayed in Table 2. The scales are found to be extremely reliable.

**Table 3.** Descriptive Values for Scales

Variables	$\bar{x}$	Ss	Kurtosis	Skewness
Happiness	19.9085	5.27056	-.147	-.335
Life Satisfaction	15.7244	4.63888	-.088	-.503

In accordance with the scales' descriptive statistics, table 3 shows that the participants' happiness levels ( $\bar{x}$ =19.90) and life satisfaction levels ( $\bar{x}$ =15.72) are high.

**Table 4.** Pearson Correlation Analysis Results for Variables

	1-	2-
Happiness	1	

Life Satisfaction	.723**	1
	.000	

\*\*p<0.001

Table 4 revealed a positive and high level correlation between participants' levels of happiness and life satisfaction (r=0.723).

**Table 5:** Simple Regression Analysis to Examine the Effect of Participants' Life Satisfaction on Happiness Levels

Dependent variable	Independent variable	$\beta$	Standard Error	Beta	t	p	R2	Durbin Watson
	Constant	6.994	.453	-	15.438	.000		
Happiness	Life Satisfaction	.821	.028	.723	29.719	.000	.522	1.903

When the independent variable's beta coefficient value, t value, and significance level of independent variable are examined, it is evident from the regression analysis results in Table 5 that life satisfaction has a statistically significant and favorable impact on happiness (t=29.719 p<0.05). It appears that 52.2% of the variation on happiness was explained (Adjusted R<sup>2</sup>=0.522). A 1-unit increase in the variable of life satisfaction causes a 0.821 increase ( $\beta$ =0.821) on happiness.

**Table 6:** Independent Sample T-Test Results of Life Satisfaction and Happiness Levels of Participants according to Gender Variable

Dimension	Gender	n	$\bar{X}$	SS	t	p
Life Satisfaction	Female	410	15.3439	4.80742	-2.371	.018
	Male	399	16.1153	4.43113		
Happiness	Female	410	19.8073	5.12384	-.553	.580
	Male	399	20.0125	5.42165		

According to the results of the t test, Table 6 demonstrates that there is a statistically significant difference between participants' life satisfaction and the gender variable in favor of male participant (p<0.05). There was no statistically significant difference, according to the t-test results, between the participants' levels of happiness and the gender variable (p>0.05).

**Table 7:** ANOVA Analysis Results of Participants' Life Satisfaction and Happiness Levels according to Age Variable

Dimensions	Class	N	$\bar{X}$	SS	F	p	Bonferroni
Life Satisfaction	<sup>1</sup> 65-67 years	274	15.94	4.49	.682	.563	-
	<sup>2</sup> 68-70 years	221	15.77	4.67			
	<sup>3</sup> 71-73 years	118	15.77	4.38			
	<sup>4</sup> 74 years and older	196	15.33	4.94			
Happiness	<sup>1</sup> 65-67 years	274	20.46	4.65	5.096	.002	1.2>4
	<sup>2</sup> 68-70 years	221	20.40	5.34			
	<sup>3</sup> 71-73 years	118	19.63	5.22			
	<sup>4</sup> 74 years and older	196	18.73	5.82			

p<0.05\*

According to the ANOVA analysis, it can be seen in Table 7 that there is no statistically significant difference between the participants' levels of happiness and the age variable (p>0.05), while the participants' life satisfaction and the age variable were found to differ statistically and significantly (p<0.05). As a result of

the Bonferroni analysis to reveal the source of the difference, it was revealed that the happiness levels of the participants aged 65-67 and 68-70 were higher than the participants aged 74 and older.

**Table 8:** Independent Sample T-Test Results of Life Satisfaction and Happiness Levels of the Participants according to Marital Status Variable

Dimension	Gender	n	$\bar{X}$	SS	T	p
Life Satisfaction	Married	518	16.35	4.50	5.228	.000
	S-D-W	291	14.60	4.67		
Happiness	Married	518	20.52	5.17	4.521	.000
	S-D-W	291	18.80	5.26		

p<0.05\* (S-D-W= Single-Divorced-Widowed)

According to Table 8, the t-test between the participants' levels of life satisfaction and happiness and the marital status variable revealed a statistically significant difference in favor of married participants (p<0.05).

**Table 9:** ANOVA Analysis Results of Life Satisfaction and Happiness Levels of the Participants according to Education Status Variable

Dimensions	Education	N	$\bar{X}$	SS	F	p	Bonferroni
Life Satisfaction	<sup>1</sup> Primary	431	14.87	4.74	14.828	.000	2.3.4>1 4>2
	<sup>2</sup> Secondary	203	15.95	4.09			
	<sup>3</sup> High School	115	17.31	4.36			
	<sup>4</sup> Bachelor's and above	60	17.96	4.61			
Happiness	<sup>1</sup> Primary	431	18.91	5.18	18.693	.000	3.4>1.2
	<sup>2</sup> Secondary	203	19.91	5.07			
	<sup>3</sup> High School	115	22.38	4.85			
	<sup>4</sup> Bachelor's and above	60	22.26	5.09			

p<0.05\*

As a result of the ANOVA analysis, Table 9 revealed a statistically significant difference between the life satisfaction and happiness levels of the participants and the education status variable (p<0.05). It was revealed as a result of the Bonferroni analysis carried out to reveal the source of the difference that the life satisfaction of the secondary, high school, undergraduate and higher graduates was higher than the primary school graduates, and the life satisfaction of the undergraduate and higher graduates was higher than the secondary school graduates. It was figured out that the happiness levels of high school graduates, undergraduate and higher graduates were higher than both primary and secondary school graduates.

**Table 10:** ANOVA Analysis Results of Participants' Life Satisfaction and Happiness Levels According to Number of Children Variable

Dimensions	Child	N	$\bar{X}$	SS	F	p	Bonferroni
Life Satisfaction	<sup>1</sup> One child	105	16.87	4.90	6.621	.001	1>3
	<sup>2</sup> Two children	243	16.12	4.54			
	<sup>3</sup> 3 and more	461	15.25	4.57			
Happiness	<sup>1</sup> One child	105	21.51	5.12	10.285	.000	1.2>3
	<sup>2</sup> Two children	243	20.48	5.07			
	<sup>3</sup> 3 and more	461	19.23	5.30			

p<0.05\*

Table 10 revealed a statistically significant difference between the life satisfaction and happiness levels of the participants and the number of children as a result of the ANOVA analysis (p<0.05). It is seen as a result

of the Bonferroni analysis to reveal the source of the difference that the life satisfaction of the participants with one child is higher than the participants with 3 or more children. It is seen that the happiness levels of the participants with one child and two children are higher than the participants with 3 or more children.

**Table 11:** ANOVA Analysis Results of Participants' Life Satisfaction and Happiness Levels According to the Variable of Sports Experience Status

Dimensions	Sports	N	$\bar{X}$	SS	F	p	Bonferroni
Life Satisfaction	<sup>1</sup> 10 years or less	108	16.70	4.51	18.108	.000	2>1 1>3 2>3.4 4>3
	<sup>2</sup> over 10 years	59	18.67	3.90			
	<sup>3</sup> I have never done sports	495	14.88	4.68			
	<sup>4</sup> I do sports intermittently	147	16.65	4.05			
Happiness	<sup>1</sup> 10 years or less	108	21.24	5.49	23.614	.000	1.2>3 4>3
	<sup>2</sup> over 10 years	59	23.38	4.66			
	<sup>3</sup> I have never done sports	495	18.78	5.21			
	<sup>4</sup> I do sports intermittently	147	21.30	4.31			

p<0.05\*

According to the ANOVA analysis, there are statistically significant differences between the participants' life satisfaction and happiness levels and their sports experience, as shown in Table 11 (p<0.05). As a result of Bonferroni analysis to reveal the source of the difference, it was revealed that participants with more than 10 years of sports experience had higher life satisfaction than participants with 10 years or less sports experience, that participants with 10 years or less of sports experience had higher life satisfaction than participants who did not do sports, that participants with more than 10 years of sports experience had higher life satisfaction than participants who did not do sports and who did sports intermittently, and that the life satisfaction of the participants who did sports intermittently was higher than the participants who do not do any sports. In terms of happiness scores, it was figured out that the happiness levels of the participants with 10 years or less sports experience and more than 10 years of sports experience were higher than the participants who did not do sports, and the happiness levels of the participants who did sports intermittently were higher than the participants who did not do any sports.

## DISCUSSION AND CONCLUSION

As a result of our research, in which we examined the effect of life satisfaction of individuals over 65 years of age on happiness through sociodemographic variables, it was found that life satisfaction and happiness levels were highly positively correlated. There aren't many studies that focus on the relationship between happiness and life satisfaction in the literature, and the inadequacy of studies on participants aged 65 and over draws attention. However, studies conducted in different age groups show that life satisfaction and happiness levels are variables that predict and directly affect each other (14,11,13).

According to the results of our study's t test, there was no statistically significant difference between the participants' levels of happiness and the gender variable. Looking at the literature, Subramanian, Kim & Kawachi (30), who came to a different conclusion from our study, revealed that women are happier than men in their study on American individuals (30). Diener, Suh, Lucas & Smith (17), who reached a similar conclusion with our study, state that there is no difference in happiness levels between women and men in general. This can be interpreted as the fact that women experience the emotions, they experience in every period of life more intensely and sensitively than men.

The level of life satisfaction is seen to significantly differ between the group averages according to age, while the relationship between happiness levels and age is not statistically significant. The analysis performed to determine the cause of the difference led to the conclusion that although all age groups showed a similar scale of life satisfaction and happiness, individuals aged 74 years and older had higher levels of life satisfaction and happiness. In the field survey made in the age variable, it is seen that life satisfaction decreases as the age

progresses, and in parallel, there is a decrease in the level of happiness. This result, which is parallel to our results, draws attention to the importance of the support to be given to individuals in the aging process (28,24).

The study's findings show that married participants experience higher levels of life satisfaction and happiness than single participants. When the literature is examined, Diener et al., (17), who reached a similar conclusion with our study, concluded that married individuals are happier than unmarried individuals (17). Similarly, it is seen that the happiness levels of married individuals are higher than those of unmarried individuals, and their marital status has predictive effects on happiness (5,32). This can be interpreted as a reflection of individuals over the age of 65 against the feeling of loneliness. It is a known fact that human beings do not prefer to be alone at any age. Especially, it is important to have someone to share life with after illness, deprivation and a broken family life after the age of 65.

According to the research findings, it was concluded that life satisfaction and happiness differ significantly according to education level. Accordingly, university graduates have higher life satisfaction than primary school graduates. It is seen in the literature that Clark and Oswald (8) came to the conclusion that education level has a negative impact on life satisfaction, which did not support the findings of our study. This can be explained by the differentiation of living standards of individuals. The country where individuals live and the country economies have an impact on this variable, and this can directly reflect on the individual.

The characteristics of the participants, who are the focal point of our study, whether they do sports or not, have led us to reach remarkable results. The levels of life satisfaction and happiness of the participants and their participation in sports were found to differ significantly. It was found in our study that the life satisfaction and happiness levels of the participants who do sports for 10 years or more and those who do sports intermittently are higher than those who do not do any sports. In the Baştuğ & Duman (2)'s study, individuals living in Germany and Turkey were compared and their life satisfaction levels were examined depending on physical activity, and it was concluded that the life satisfaction levels of the participants who engage in physical activity differ significantly from those who do not. While drawing attention to the importance of physical activity in another study, it was stated that being psychologically sound and staying fit lead to positive results in the individual, thus reducing the levels of depression, stress and anxiety (28,29,22,7,19)

The most striking of the results we obtained in our study is that the variable that has an effect on the life satisfaction of individuals aged 65 and over is related to their state of doing sports. This conclusion is supported by numerous studies in the literature. Therefore, it is concluded that it is important for individuals aged 65 and over to do sports or be involved in a physical activity in order to support their life satisfaction and happiness levels. This shows us that physical activities should be increased especially for this age group, and individuals staying in nursing homes should be supported in this sense, making a positive contribution to both their life satisfaction and happiness levels.

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